

REMARKS

By this Amendment, claims 1, 17 and 34 have been amended to merely clarify the recited subject matter. Support for these amendments may be found at page 6, lines 11-13 of Applicant's specification. Claims 1-34 are pending.

Claims 1-11, 13-15, 16-27 and 29-34 were rejected under 35 U.S.C. 103(a) as being obvious from Kay et al. (U.S. 5,357,513; hereafter "Kay") and claims 12 and 28 were rejected under 35 U.S.C. 103(a) as being obvious from Kay and Bjork et al. (U.S. 6,084,862; hereafter "Bjork"). Applicant traverses the rejections because the cited prior art fails to disclose, teach or suggest all the features recited in the rejected claims. For example, the cited prior art fails to teach or suggest the claimed transmission method (independent claim 1), radio system (independent claim 17), or base station (independent claim 34), wherein transmissions are received in the base station using different RF-heads and time slots and frequencies are used more efficiently by utilizing a separation between different RF-heads.

More specifically, the cited prior art fails to teach or suggest the claimed invention wherein, the influence of interference (caused by timing of transmissions of subscriber terminals being adjusted in such a way that different transmission are separable in channel estimation although they use a same timeslot and frequency) is restricted by routing signals via different RF-heads (i.e., spatial separation).

Applicant recognized that since the signals transmitted at the same frequency and in the same time slot can be separated after the signals have been received, the radio system can be implemented by using a minimal number of radio frequencies. Additionally, signals can be received even at low signal reception levels.

To the contrary, Kay merely teaches a radio telephony system with a plurality of transmitting stations, where each station transmits information bursts to another station on radio carrier frequencies divided into time slots and where delays of undetermined duration may occur between subsequent information bursts. Kay teaches generating an adjustment request regarding the power with which the information bursts are transmitted from a transmitting station to a receiving station, detecting an information burst transmission at the receiving station, measuring the time which elapses following the transmission, and comparing the elapsed time with a predetermined threshold value.

However, as recognized by the Office Action, Kay fails to teach or suggest that a base station comprises a plurality of RF-heads. Thus, Kay fails to teach or suggest the claimed invention wherein transmissions are received in the base station using different RF-heads and

time slots and frequencies are used more efficiently by utilizing a separation between different RF-heads.

Bjork fails to remedy the deficiencies of Kay because Bjork merely teaches determining a residual energy metric from a corresponding channel estimate, a known training sequence and a corresponding set of received samples. The one or more residual energy metrics are then used to estimate received useful energy and reflection energy in a received signal. A measure of time dispersion in the signal that has been received from the channel may then be obtained by comparing the estimated received useful energy and the estimated reflection energy.

Thus, the combined teachings of Kay and Bjork fail to disclose, teach or suggest the claimed invention wherein transmissions are received in the base station using different RF-heads and time slots and frequencies are used more efficiently by utilizing a separation between different RF-heads. Therefore, the prior art rejections are traversed.

Accordingly, Applicant looks forward to receiving a Notice of Allowance indicating the allowability of the pending claims. However, if anything further is necessary to place the application in condition for allowance, Applicant requests that the Examiner telephone Applicants undersigned representative to discuss any outstanding issues.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

PILLSBURY WINTHROP SHAW PITTMAN LLP


CHRISTINE H. MCCARTHY

Reg. No. 41844

Tel. No. 703 770.7743

Fax No. 703 770.7901

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P.O. Box 10500
McLean, VA 22102
(703) 770-7900